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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,311	<b>-</b>	02/28/2002	Uwe-Peter Weigmann	691178.90011	7589
26710	7590	08/22/2003			
QUARLES			EXAMINER		
411 E. WIS SUITE 2040		AVENUE	OJINI, EZIAMARA ANTHONY		
MILWAUKEE, WI 53202-4497				ART UNIT	PAPER NUMBER
				3723	
				DATE MAILED: 08/22/2003	$\mathcal{B}$

Please find below and/or attached an Office communication concerning this application or proceeding.

	_			_	8
		Applicati	on No.	Applicant(s)	
. Office Action Summary		10/085,3	11	WEIGMANN ET	AL.
		Examine	<u> </u>	Art Unit	
	·	Anthony	Ojini	3723	
	- The MAILING DATE of this commun			h the correspondence a	ddress
Period fo	• •	OD DEDLY 10 OF T	50 EVOIDE • M	NITH(0) 500M	
THE N - Exten after S - If the - If NO - Failur - Any re	DRTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN sions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comperiod for reply specified above is less than thirty (3 period for reply is specified above, the maximum st e to reply within the set or extended period for reply ply received by the Office later than three months a d patent term adjustment. See 37 CFR 1.704(b).	ICATION.  of 37 CFR 1.136(a). In no evenunication.  10) days, a reply within the star attutory period will apply and worwill, by statute, cause the appropriate the appropriat	vent, however, may a re tutory minimum of thirty vill expire SIX (6) MONT plication to become ABA	ply be timely filed  (30) days will be considered tim  HS from the mailing date of this  NDONED (35 U.S.C. § 133).	
1)	Responsive to communication(s) fi	led on 28 February 2	002 .		
2a)□		2b)⊠ This action is			
3)□	Since this application is in condition	n for allowance excer	ot for formal matt	ers, prosecution as to	the merits is
•—	closed in accordance with the pracon of Claims				
4)⊠	Claim(s) 1-11 is/are pending in the	application.			
4	fa) Of the above claim(s) is/a	re withdrawn from co	onsideration.		
5)	Claim(s) is/are allowed.		•		
6)⊠	Claim(s) <u>1-11</u> is/are rejected.				
7)	Claim(s) is/are objected to.				
•	Claim(s) are subject to restric	ction and/or election r	requirement.		,
	on Papers				
•	The specification is objected to by the				
10)⊠ 1	he drawing(s) filed on 28 February				
11) 🗆 7	Applicant may not request that any ob the proposed drawing correction file				
11/1	If approved, corrected drawings are re	•	•	sapproved by the Exami	1101.
12) 🗀 7	The oath or declaration is objected to		moo dodom		
•	nder 35 U.S.C. §§ 119 and 120	,			
	Acknowledgment is made of a claim	for foreign priority ur	nder 35 U.S.C. &	119(a)-(d) or (f)	
•	All b) Some * c) None of:	i tor toroign phoney ar	11401 00 0.0.0.	110(a) (a) 51 (i).	
,	1.⊠ Certified copies of the priority	documents have bee	en received.		
	2.☐ Certified copies of the priority			polication No.	
	3. Copies of the certified copies				al Stage
	application from the Interree the attached detailed Office action	national Bureau (PCT	Rule 17.2(a)).		3
14) 🗌 A	cknowledgment is made of a claim f	or domestic priority u	nder 35 U.S.C. §	119(e) (to a provision	al application).
	☐ The translation of the foreign lar cknowledgment is made of a claim	,	· ·		
Attachment	(s)				
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (F nation Disclosure Statement(s) (PTO-1449) P			ummary (PTO-413) Paper N formal Patent Application (P	
S. Patent and Tra	ademark Office 7. 04-01)	Office Action Summa	rv	Part of Paper No. 7	

Art Unit: 3723

#### **DETAILED ACTION**

#### Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the expressions "the tool is reset to a smaller size" in claim 5, and "wherein the smoothing of the peaks of the surface structure takes place by using different tool" in claim 10, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 1, the expression "the surface of a bore" lacks antecedent basis; in line 5, the expression "the ratio of the stroke speed" lacks antecedent basis; in line 5, the expression "the rotational speed" lacks antecedent basis; and in line 6, the expression "the normal ratio" lacks antecedent basis.

In claim 1, it is unclear what steps applicant is claiming.

Art Unit: 3723

In claim 7, the expression "wherein, before or during remachining with the higher speed" in unclear which limitation applicant is referring to.

In claim 8, the expression "the peaks of the surface structure" lacks antecedent basis.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,6,7,8,9,1,1, as well as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Nagel (6,012,973).

With respect to claims 1-4,6, Nagel discloses a method of honing inner surface (11) of a cylinder (12) with honing tool (20) comprising the following steps: machining the said inner surface (11) of a cylinder (12) with a honing tool (20) driven both in a rotary (18) and in an axially reciprocating (19) manner (i.e. one stroke and return stroke); and increasing a ratio of axially reciprocating speed to the rotational speed of the tool compared with the normal ratio honing tool during machining (see col. 3, lines 18-33 & figure 1).

With respect to claim 7, Nagel discloses wherein before remachining with the higher speed, there is a honing tool infeed (see fig.1)

With respect to claims 8,9, Nagel discloses wherein the peaks of the surface of the inner cylinder are smoothed with aid of the honing tool (20).

Art Unit: 3723

With respect to claim 11, Nagel discloses wherein honing comprises plurality of axially reciprocating strokes (see col. 3, lines 18-21 & fig. 1).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagel.

With respect to claim 5, Nagel fails to disclose wherein, prior to the remachining return stroke, the tool is reset to a smaller size.

It would have been an obvious matter of design choice to provide apparatus of Nagel with a smaller size, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

With respect to claim 10, Nagel fails to disclose wherein the smoothing of the peaks of the surface structure takes place by using a different tool.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide apparatus of Nagel with a different tool for smoothing of the peaks of the surface structure, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the

**Art Unit: 3723** 

intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. See also *Ballas Liquidating Co. v. Allied industries of Kansas, Inc.* (DC Kans) 205 USPQ

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blake, Hyatt, Roitner, Sandhof, Lin et al., Nagel et al, and Higashikawa disclose honing tool respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Ojini whose telephone number is 703 305 3768. The examiner can normally be reached on 7.30 to 5.00 Tuesday-Friday with every other Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 703 308 2687. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 3590 for regular communications and 703 746 3277 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 1148.

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August 14, 2003

Page 5